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# Young Investor's Decisions in the Stock Market: The Role of Herding and Third-Party Recommendations

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**ABSTRACT**

This research focuses on the influence of overconfidence and risk perception on investment decisions and advocate recommendations, as well as the ability of herding behaviour as a moderating variable at PT Phintraco Sekuritas Surabaya. Uses quantitative methods with 96 investor respondents whose data was collected through questionnaires. Research findings show that overconfidence and risk perception do not significantly influence investment decisions, whereas advocate recommendations do. Although herding behaviour is not a moderating variable, research indicates that it substantially affects investment decisions when treated as an independent variable. Investors tend to consider the decisions of other investors when making investment decisions, which influences the quality of their choices. Furthermore, predominantly students, novice investors often prioritize other investors' opinions and refrain from using personal analysis results to make investment decisions. This research can provide valuable insights to the Indonesian Stock Exchange and securities companies to continue providing intensive outreach on the importance of investment and offering investors training, workshops, and studies. The hope is that in the future, investors will become more informed and able to generate income from their investments. This can lead to investors no longer being afraid to invest because they feel they have sufficient knowledge and can make informed decisions. By encouraging an increase in people's income and increased capital for issuers, the economy can further develop.

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## INTRODUCTION

The Indonesian Stock Exchange (BEI) East Java Representative Office recorded the growth of capital market investors in East Java, and the increase exceeded the growth of national-scale investors. It grew 62% higher, while nationally it was 60%. This means that in East Java, there were an additional 138,597 Single Investor Identifications or SIDs as of August 2021. In contrast, the number of capital market investors from the SID indicator as of August 2021 is recorded at 360,414 SIDs. This made East Java chosen as the first province to hold the Integrated Capital Market Socialization and Education (SEPMT) program in 2022 because it saw the huge potential of issuers and investors, which could still be explored and optimised either through utilising the capital market as an alternative source of funding. Business, as well as a safe, comfortable and trustworthy place to invest (Ryo, 2021).

The demand in question should not be attributed to the Indonesian Exchange (BEI). As an entity tasked with stimulating the Indonesian economy, the BEI is actively working to boost the number of domestic investors. The Indonesian Exchange began a "Yuk Nabung Saham" campaign on November 12, 2015. The establishment of "Yuk Nabung Saham" is a company that encourages the Indonesian populace to invest in the stock market through socialisation and education. Only with a minimum investment of Rp.100,000,- can students and the general public purchase stock through a securities company. The purpose of the "Yuk Nabung Saham" campaign is to enhance the general public's confidence in investing in the stock market through responsible and systematic stock purchases.

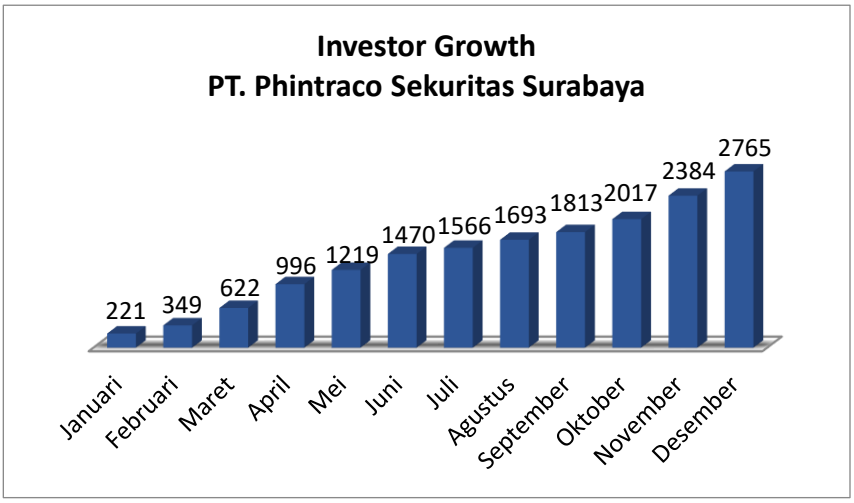


Figure 1
Investor Growth PT. Phintraco Securities 2023

The "Yuk, Nabung Saham" campaign has continued to this day and has had a significant impact on the Muslim community and students. This assertion is supported by the investor growth data from PT Phintraco Sekuritas for 2022, as illustrated in Figure

1, indicating a significant monthly increase. Investors' confidence in selecting and executing their investment portfolio naturally increases due to the rise in the number of investors. In addition, the number of factors considered critical for investment decision-making will increase, affecting the investor's decision-making process. Consequently, the investor is expected to be rational and consistent in each investment decision (Loris & Jayanto, 2021).

Basic investment concepts that direct investment decision-making should be understood to support the demand for accuracy and rationality. This understanding is the relationship between the expected return and the risk of an investment; the higher the expected return, the higher the risk that will be faced because these two things are unidirectional (linear) (Pratiwi, 2016). However, it turns out that Ramdani's research (Ramdani, 2018) reveals that every decision-making process an investor carries out will involve his emotions. The involvement of emotions in the investment decision-making process often causes an investor to be less rational. Apart from that, when investors face risky situations, objectivity, feelings, and other psychological factors usually influence investor decision-making (Anisa, 2012).

These forms of irrational investors are expressed in behavioural biases. Behavioural bias is a tendency for prediction errors (Setiawan et al., 2018). These behavioural biases consist of each individual's cognitive and emotional factors that can influence investment decisions. Investor behaviour influenced by mental and emotional factors makes investors unable to translate information correctly, so investors become irrational. Decisions based only on irrational considerations will produce irrational results (Ayu Wulandari & Iramani, 2014).

The study was conducted with participants who were PT customers. Phintraco Sekuritas is a member of the Indonesian Stock Exchange and provides Broker-Dealer services as a Securities Company. Phintraco Sekuritas has achieved 8 MURI Records and has an extensive presence across Indonesia, with Branch Offices and Investment Galleries spanning from Aceh to Papua. Phintraco Sekuritas is actively contributing to the growth of the Indonesian capital market by establishing 23 branch offices across Indonesia and attracting many investors (fig. 1). PT. Phintraco Sekuritas has also collaborated with more than 154 universities as a means of introducing the Capital Market from an early age to the academic world by opening the Indonesian Stock Exchange Investment Gallery, which is spread across more than 45 cities throughout Indonesia and 20 of them are Sharia Investment Galleries. Apart from that, PT. Phintraco Sekuritas also collaborates with BPRs, markets and hospitals and has served over 65,000 customers. PT. Phintraco Sekuritas targets to acquire 20,000 new investors this year. Phintraco's average daily transactions reach between IDR 10 billion and IDR 15 billion, or 0.25% of total stock market transactions (Sekuritas, 2020).

Investment decisions have a very long scope. Therefore, the decisions an investor wants to make must go through a good consideration stage because they have high risks (Daniati & Prasetyo, 2022). Investors need relevant information to make investment decisions (Khoidah & Wijayanto, 2017). However, investment decisions cannot be separated from a person's cognitive bias because investment decision-making is directly related to the mind and conscience. Making investment decisions is an action that is very likely to be influenced by a person's behaviour in dealing with finances (financial behaviour) (Budiarto & Susanti, 2017).

Two methods are used when making decisions using intuition: rational and irrational. Rational decision-making involves rationalising based on logic and information about the investment that has been obtained. Meanwhile, when investors make investment decisions irrationally, they tend to use cognitive behaviour.

The Effect of Overconfidence on Investment Decisions; One of these behaviours is overconfidence. Overconfidence is when an investor tends to be too confident in his capabilities and understanding when making decisions (Afriani & Halmawati, 2019). Even investors who behave overconfidently assume their abilities are above average and think they are superior to others (Pradhana, 2018). Someone with high overconfidence is more likely to be brave in making decisions and vice versa. This is supported by research (Aristiwati & Hidayatullah, 2021), (Amelinda & Ongkowidjaja, 2022), (Rabbani & Saputra, 2022), (Ferennita et al., 2022) which states that overconfidence influences investment decisions. This is different from the research results from (Asandimitra & Kautsar, 2019), (Fridana & Asandimitra, 2020), (Rona & Sinarwati, 2021) which state that overconfidence does not influence investment decisions. Based on the inconsistency of results related to overconfidence behaviour, researchers intend to re-examine the influence of overconfidence on investment decisions. So the hypothesis:
*H1: Overconfidence has a positive effect on investment decisions*.

The Influence of Risk Perception on Investment Decisions; In line with the previous paragraph, which reveals the importance of investors' understanding of the relationship between the expected return and the risk of an investment, investors are expected to be able to assess the risk of an investment before determining their investment choice. Risk perception can be the assessment of the risks involved in an investment. Risk perception is an individual's perspective on the risks they will face. Risk perception is subjective in determining the best alternative between investment decisions (Anggraini & Mulyani, 2022). Individuals with high-risk perceptions will make decisions with full consideration and vice versa (Fridana & Asandimitra, 2020). This was also agreed upon by (Yolanda & Tasman, 2020), who stated that risk perception had a positive and significant influence on the investment decisions of the Padang City Millennial Generation. However, this contradicts research (Pelawi & Suliati, 2021), which states that risk perception does not significantly influence individual investment interest in the stock capital market. The differences in the results of research that have been carried out

encourage researchers to re-examine the influence of risk perception on investment decisions so that the hypothesis is as follows:
*H2: Risk perception has a positive effect on investment decisions*

The influence of Advocate Recommendation on investment decisions; Another behaviour that affects investment decisions is how investors react to the investment choices of their peers, letting others' opinions influence their investment strategies. This behaviour is known as advocate recommendation, which is then identified as investors' behavioural tendency to follow others' actions. Investors, usually clients of brokers or securities companies, hope to get the best investment service advice (Kibegwa et al., 2017). Practitioners consider this carefully because investors rely on collective information more than personal information, which can result in deviations in security prices from fundamental values (Ramdani, 2018). Advocate recommendations include share transactions that investors accept, whether buy, sell or hold. These recommendations can be obtained by brokers, securities companies, or friends and family (Yulfiswandi et al., 2022). (Ferennita et al., 2022), (Asandimitra & Kautsar, 2019) (Yulfiswandi et al., 2022) revealed that Advocate Recommendation significantly influences investment decisions. Meanwhile, according to research results (Velumoni D. & Rau S. S, 2015), the Advocate Recommendation variable does not affect investment decisions. Inconsistent research results prompted researchers to re-examine the relationship between advocate recommendations and investment decisions so that the hypothesis is:
*H3: Advocate recommendation has a positive effect on investment decisions*

The influence of Herding Behavior on investment decisions ; Investors frequently emulate their peers' decisions without considering their risk tolerance or capacity to take risks (Waweru et al., 2008). Investors commonly use "herd behaviour" or "cascade effect" to describe this phenomenon. According to prior research, investors are believed to engage in this behaviour to establish a connection with the individuals in their social environment (Banerji et al., 2020). According to (Goodfellow et al., 2009), herding behaviour is more frequently observed among individual retail investors than institutional investors. Herd behaviour often results in the divergence of securities prices from their true underlying values, Driving them towards an impractical or unviable assessment (Dewan & Dharni, 2019). The influence of herd behaviour has resulted in observing diverse investor behaviour in numerous countries (Shukla et al., 2020). (Poshakwale & Mandal, 2014) discovered that the flocking effect is evident in both bullish and bearish markets, with a greater impact in bearish markets. Several theories have been proposed by researchers that establish a correlation between herd behaviour and geographical demographics (Indārs et al., 2019), the age of investors (Choi, 2016) and the occurrence of a crisis (Garg & Gulati, 2013). In this study, researchers hypothesise that:
*H4. Herding conduct has a positive influence on investment decisions.*

Herding Behavior as Moderating; Apart from the individual investor behaviour mentioned previously, there is also herding behaviour, which is the most common behavioural bias, and investors tend to follow the investment decisions made by the majority (Ramdani, 2018). The main reason for herding is pressure or influence by colleagues or people around you. Herding provides risky results because investors need to pay more attention to confidence in their abilities and follow the actions of other investors, the choices of most people, and investment experts. (Rijalul Fikri et al., 2022), (Aristiwati & Hidayatullah, 2021) states that herding has a positive effect, while (Rona & Sinarwati, 2021) state that herding does not affect investment decisions.

Given the discrepancy between these results, researchers are motivated to examine whether the capacity to hear behaviour is a moderating variable. Thus, the hypothesis is:

*H5: Herding behaviour can mitigate the impact of overconfidence on investing decisions.*

*H6: Herding behaviour can attenuate the impact of risk perception on investment choices.*

*H7: Herding behaviour has the potential to attenuate the impact of advocate suggestions on investment decisions.*

## METHODOLOGY

### Research design

The primary objective of this research is to empirically examine hypotheses, as doing so provides a more comprehensive comprehension of the interconnections between variables (Sekaran, 2008); (Saunders et al., 2009); (Ghauri & Gronhaug, 2010).

### Research approach

This study aims to investigate how behavioural factors affect investment choices. As a result, the deductive method is considered more appropriate than the inductive method (Sekaran, 2008); (Saunders et al., 2009); (Ghauri & Gronhaug, 2010)..

### Sampling and data collection

The population in this study was 2765 investors. This research uses random sampling, namely a sample selection method where each member of the population has the same opportunity to be selected as a sample member (Sugiyono, 2016). It also uses the Slovin formula. Based on the Slovin formula, a sample size of 96 investor respondents at PT Phintraco Securities Surabaya.

Several techniques for collecting data include unstructured interviews, structured interviews, semi-structured interviews, group discussions and observation. Questionnaires are often used in quantitative research as a data collection method because they save time and are cost-effective compared to other methods such as interviews, video conferencing, and brainstorming (Bryman & Bell, 2007).

### Operationalisation of variables

- This research aims to investigate how investor behaviour impacts investment decisions. A questionnaire approach was utilised to meet the research goals, and a

survey was developed using recognised assessment instruments found in previous research. The authors used a five-point Likert scale to measure all multi-item constructs, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). A reflective measurement model was used to operationalise all the constructs.

- Overconfidence behaviour is measured with four question items adapted from (Budiarto & Susanti, 2017). To measure overconfidence, investors are asked to answer the extent to which they agree/disagree with three indicators that measure the accuracy of investment selection, confidence in their abilities and confidence in investment selection. Risk perception behaviour is measured with three question items adapted from (Loris & Jayanto, 2021). To measure risk perception, investors are asked to answer how much they agree/disagree with three indicators: warning, controlled, and high speculation risk. Advocate recommendation behaviour is measured with three question items adapted from (Antony & Joseph, 2017). To measure advocate recommendation, investors are asked to answer the extent to which they agree/disagree with three indicators that measure recommendations from well-known analysts, recommendations based on the majority and lack of personal judgment. Herding behaviour is measured with three question items adapted from (Ngoc, 2013).
- Investors are requested to evaluate the degree to which they agree or disagree with three measures that assess the impact of other investors' choices, transaction decisions, and responses to decision changes to evaluate herding behaviour. Moreover, investment choices are evaluated using five question items from (Septiyani, 2019). In this assessment, investors are requested to indicate their level of agreement or disagreement with four measures that evaluate risky investments, such as investments made without careful consideration, investments lacking guarantees, and investments based on personal beliefs.

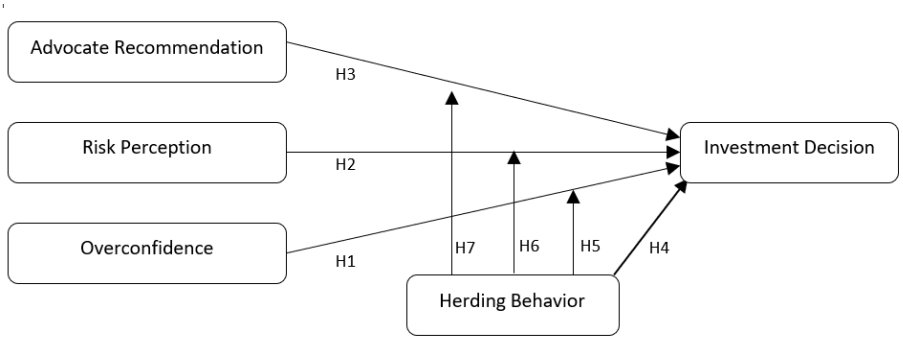


Figure 2
Research Framework

Data analysis methods

- This research uses SEM (Structural Equation Modeling) causality analysis, known as Partial Least Square (PLS), using Smart PLS 4.0 software to analyse the influence of Overconfidence (X1), Risk Perception (X2), and Advocate Recommendation (X3) on Investment Decision (Y) with Herding Behavior (Z) as a moderating variable. This research adopts quantitative methods and has a descriptive research design. The primary data in this research originates from a questionnaire from investors at PT Phintraco Sekuritas Surabaya.

## RESULTS AND DISCUSSION

### Respondent Characteristics

According to the type of investor PT. Phintraco Sekuritas Surabaya shows that the kind of student investor respondents was 74 people with a percentage of 77%, while non-students were 22 people with 23%.

### Measurement Model Testing (Outer Model)

The aim of processing secondary data through the PLS test is to observe the validity and reliability of each variable and understand the relationship between indicators in the independent, dependent and moderating variables.

Validity Test Results with Convergent Validity

Table 1. Outer Loading Result

| | |
|---|---|
| X1.1 | 0.867 |
| X1.2 | 0.908 |
| X1.3 | 0.821 |
| X1.4 | 0.799 |
| X2.1 | 0.833 |
| X2.2 | 0.889 |
| X2.3 | 0.817 |
| X3.1 | 0.868 |
| X3.2 | 0.774 |
| X3.3 | 0.852 |
| Y1 | 0.857 |
| Y2 | 0.867 |
| Y3 | 0.903 |
| Y4 | 0.890 |
| Y5 | 0.779 |
| Z1 | 0.939 |
| Z2 | 0.912 |
| Z3 | 0.871 |

Table 1 above displays the results of data processing using SmartPLS. It is known that all indicators have loading factor values that exceed 0.70, even though the outer loading is X1.4. This is based on the theory (Hair Jr, 2020), which states that when the loading value is small, the level of validity is low, so the indicator needs to be removed from the model. Apart from loading factors, convergent validity can be seen based on the Average Variance Extracted (AVE) value. The Average Variance Extracted (AVE) value in this study is listed in the table below:

Table 2. Validity Result

| | Cronbach's alpha | (rho_a) | (rho_c) | AVE |
|---|---|---|---|---|
| X1 | 0.872 | 0.889 | 0.912 | 0.722 |
| X2 | 0.803 | 0.812 | 0.884 | 0.717 |
| X3 | 0.787 | 0.845 | 0.871 | 0.693 |
| Y | 0.913 | 0.924 | 0.935 | 0.743 |
| Z | 0.893 | 0.895 | 0.933 | 0.824 |

Validity Test Parameters in the PLS Measurement Model: (Chin & Todd, 1995); (Salisbury, W.D., Chin, W.W., Gopal, A., dan Newsted, 2002); (Abdillah & Hartono, 2014)).

Table 3. PLS Measurement Model Validity Test Parameters

| Uji | Parameter | Rule of Tumbs |
|---|---|---|
| Validitas Konvergen | Faktor loading (outer loading) | > 0,7 |
| | Average Variance Extracted (AVE) | > 0,5 |
| | Communality | > 0,5 |
| Validitas Deskriminan | Akar AVE dan korelasi variabel laten | Akar AVE > korelasi variabel laten (Discriminant Validity) |
| | Cross Loading (Discriminant Validity) | > 0,7 dalam satu variabel |
| Reliabilitas | Cronbach Alpha | > 0,6 |
| | Composite Reliability | > 0,6 |

Table 2 shows all the AVE results for each variable with a score of > 0.5. This indicates that the AVE value is good and reliable.

Validity Test Results with Discriminant Validity

Table 4. Cross Loadings Result

| | X1 | X2 | X3 | Y | Z |
|---|---|---|---|---|---|
| **X1.1** | 0.867 | 0.212 | 0.168 | 0.278 | 0.152 |
| **X1.2** | 0.908 | 0.383 | 0.303 | 0.436 | 0.323 |
| **X1.3** | 0.821 | 0.434 | 0.207 | 0.339 | 0.290 |
| **X1.4** | 0.799 | 0.324 | 0.379 | 0.389 | 0.335 |
| **X2.1** | 0.322 | 0.833 | 0.185 | 0.277 | 0.190 |
| **X2.2** | 0.341 | 0.889 | 0.231 | 0.350 | 0.244 |
| **X2.3** | 0.367 | 0.817 | 0.250 | 0.340 | 0.301 |
| **X3.1** | 0.323 | 0.379 | 0.868 | 0.615 | 0.422 |
| **X3.2** | 0.157 | 0.145 | 0.774 | 0.354 | 0.401 |
| **X3.3** | 0.291 | 0.063 | 0.852 | 0.430 | 0.470 |
| **Y.1** | 0.347 | 0.351 | 0.552 | 0.857 | 0.653 |
| **Y.2** | 0.337 | 0.353 | 0.526 | 0.876 | 0.719 |
| **Y.3** | 0.437 | 0.288 | 0.471 | 0.903 | 0.733 |
| **Y.4** | 0.392 | 0.282 | 0.506 | 0.890 | 0.641 |
| **Y.5** | 0.369 | 0.412 | 0.473 | 0.779 | 0.370 |
| **Z.1** | 0.385 | 0.235 | 0.457 | 0.670 | 0.939 |
| **Z.2** | 0.393 | 0.399 | 0.510 | 0.701 | 0.912 |
| **Z.3** | 0.125 | 0.154 | 0.428 | 0.640 | 0.871 |

Table 4 shows the cross-loading estimation results, showing that the correlation value between the construct and its indicators is greater than the correlation value with other constructs. Therefore, it can be concluded that the construct has good discriminant validity. Meanwhile, the composite reliability results, based on Table 2, show a score > 0.7, so it can be said that the reliability value is good.

Inner Model Test Results

Table 5. R Square

| | R-square | R-square adjusted |
|---|---|---|
| Y | 0.638 | 0.662 |

Table 5 shows that the variables overconfidence (X1), risk perception (X2), advocate recommendation (X3), and herding behaviour (Z) can explain the investment decision variable (Y) by 0.638 or 63.8%. The remaining 36.2% is explained by other variables not included in the model hypothesis.

The R-squared value is divided into three categories: strong, moderate, and weak (Hair Jr, 2020). He said that an R-squared value of 0.75 is classified as strong, 0.50 as mild, and 0.25 as weak. These categorisations differ from (Chin & Todd, 1995) classifications, where the R-squared value is considered strong if it is above 0.67, moderate if between 0.33 and 0.67, and weak if between 0.19 and 0.33. In this

investigation, the R-squared value is 0.638, positioning it in the mild category according to either Hair or Chin.

According to (Ghozali, I. Latan, 2012), the coefficient of determination falls within the range of 0 to 1. When the value approaches 1, the independent variable supplies nearly all the necessary information to forecast the dependent variable. Conversely, as the R2 value decreases, the capacity of the independent variables to elucidate the dependent variable becomes rather restricted.

Hypothesis testing

Test the Main Hypothesis

After convergent and discriminant validity are met, test the main hypothesis between variables before continuing with hypothesis testing using moderation. At a significance level of 10%, the results of bootstrapping the main hypothesis test between variables are produced in Figure 3.

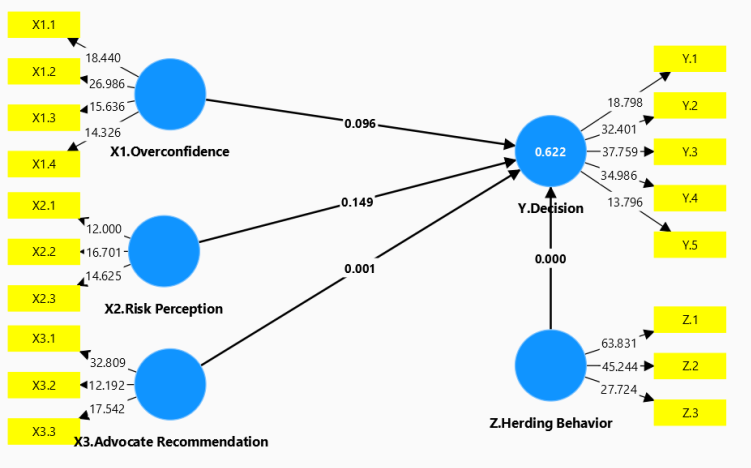


Figure 3. Main Hypothesis Test Results between Variables

Table 6. Path Coefficients

| | O | M | STDEV | T | P values |
|---|---|---|---|---|---|
| X1 -> Y | 0.133 | 0.134 | 0.080 | 1.664 | 0.096 |
| X2 -> Y | 0.108 | 0.103 | 0.075 | 1.443 | 0.149 |
| X3 -> Y | 0.236 | 0.234 | 0.073 | 3.218 | 0.001 |
| Z -> Y | 0.542 | 0.551 | 0.088 | 6.122 | 0.000 |

Figure 3 and Table 6 display the Path Coefficients output, which serves as the primary test result for the hypothesis. A general rule for determining whether a research hypothesis is supported is as follows:

(1) If the coefficient or direction of the variable relationship (as indicated by the original sample value) aligns with the hypothesised relationship,

(2) If the statistical t value exceeds 1.64 (for two-tailed) or 1.96 (for one-tailed) and the probability value (p-value) is below 0.1 or 10%.

The table shows that the variable X2 (Risk Perception) is 0.149, above 0.1. This means that the Risk Perception variable does not affect Investment Decisions. (Baron & Kenny, 1986) stated, as cited by (Abdillah & Hartono, 2014), that examining the impact of the moderating variable is feasible only if the primary effect of the independent variable on the dependent variable is notable. If this condition is not satisfied, investigating the mediation effect is unnecessary, as the outcomes typically turn out to be insignificant. Therefore, with a significance level of 10%, the findings for Risk Perception (X2) are not statistically significant, rendering them untestable for moderation and hence are disregarded.

Next, a hypothesis test was carried out using moderating, which resulted in Figure 4 and Table 7.

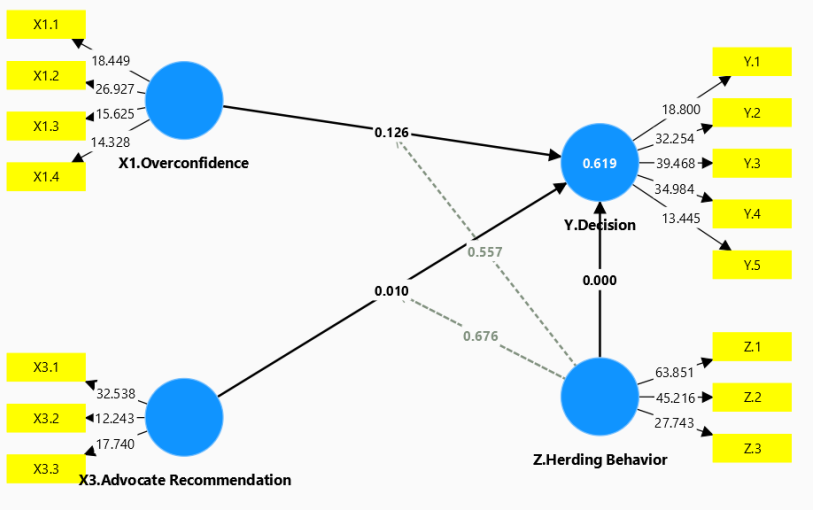


Figure 4. Hypothesis Test Results with Moderating Variables

Table 7. Path Coefficients with Moderating

| | O | M | STDEV | T | P values |
|---|---|---|---|---|---|
| X1 -> Y | 0.170 | 0.164 | 0.111 | 1.531 | 0.126 |
| X3 -> Y | 0.239 | 0.243 | 0.093 | 2.588 | 0.010 |
| Z -> Y | 0.565 | 0.583 | 0.085 | 6.658 | 0.000 |
| Z x X1 -> Y | -0.054 | -0.044 | 0.091 | 0.588 | 0.557 |
| Z x X3 -> Y | -0.032 | -0.042 | 0.075 | 0.419 | 0.676 |

From the path coefficient value results, if the T-statistics > 1.96 means it is significant, and the P-value has a value < 0.05, then the hypothesis (has influence). Table 7 shows the Path Coefficient results, which explain the level of significance between constructs with the following explanation:

## Discussion

### The Influence of Overconfidence on Investment Decisions

Table 7 shows that the overconfidence value is 0.126 > 0.100, which means that overconfidence does not affect investment decisions, so H1 in this study is rejected. The findings of this investigation back up earlier studies (Asandimitra & Kautsar, 2019) that concluded overconfidence does not affect investment decision-making. This happens because respondents think their knowledge and abilities do not support investment decisions. This means that respondents make investment decisions not based on the respondents' knowledge and skills but may be based on information and recommendations from stockbrokers, friends, or family.

The findings of this study contrast with the conclusions presented by (Rona & Sinarwati, 2021), (Rabbani & Saputra, 2022), and (Ferennita et al., 2022), which suggested that overconfidence positively and significantly influences investment decisions. This is because investors have sufficient experience and knowledge about investment; this will encourage their psychological factors and give rise to overconfidence, which estimates greater profits when making investment decisions. This shows an underestimation of risk and will increase the investment decisions taken.

### The Influence of Risk Perception on Investment Decisions

From the results of the main test between variables, the Risk Perception results were 0.149 > 0.1, so Risk Perception does not influence Investment Decisions. This supports research (Pradikasari & Isbanah, 2018) and (Pelawi & Suliati, 2021), which states that risk perception does not positively influence investment decisions. However, this must align with research (Anggraini & Mulyani, 2022), which states that risk perception significantly influences investment decisions.

This research shows that respondents do not realise the risks of investing in the capital market, so investors become brave enough to take risks. For example, when global economic conditions show uncertainty, it has the impact of uncontrolled fluctuations in average share prices and results in low levels of investment returns received and losses on share investments made. However, many investors are still trapped in false profits and uncertainty when investing in the capital market. This causes investors to ignore the risks in deciding to invest in shares with a high interest in investing in shares, especially among students during the 2020 and 2021 pandemic. This is proven by a study conducted by Schroders Global Investors (2021). Nearly a third of investors globally invested more during the COVID-19 pandemic.

(Baron & Kenny, 1986), as cited by (Abdillah & Hartono, 2014), stated that testing the moderating variable's impact is appropriate when the main effect of the independent variable on the dependent variable is statistically significant. If this condition is not met, there is generally no need to proceed with testing for the mediation effect, as the outcomes are likely to be non-significant. By this statement, the insignificant results in the main test

of the risk perception variable on investment decisions mean that this variable must be eliminated in hypothesis testing using moderating variables.

The Influence of Advocate Recommendations on Investment Decisions

The results of the advocate recommendation hypothesis test with a value of 0.010 < 0.100 so that this variable influences investment decisions. These results align with previous research conducted by (Ferennita et al., 2022), stating that advocate recommendations positively affect investment decision-making but are not in line with research (Akbar et al., 2016). Advocate Recommendation, which influences investment decisions, shows that investors rely on information obtained from current literature and technology when making investment decisions. Investors can easily learn to invest independently and use it as a basis for making investment decisions. Apart from that, investors are not easily influenced by other investors or follow along. Investors consider recommendations according to weights based on the level of importance of factors, namely, important to less important. Factors that can be identified to obtain recommendations are the company's status in the industry, the company's expected income, the condition of the company's profits, the past performance of the company's shares and the dividends received by investors.

The Influence of Herding Behavior on Investment Decisions

The hypothesis test of herding behaviour yields a value of 0.000 < 0.100, indicating that the variable significantly influences investment decisions. This result is consistent with the research conducted by (Rijalul Fikri et al., 2022), which states that herding behaviour has a positive and significant impact on investment decision-making. This tends to occur because investors consider other investors' decisions when making investment decisions and state that investor behaviour is deemed contradictory to making investment decisions and not always rational, thus affecting the quality of investor decision-making. When making investment decisions, novice investors prioritise other investors' opinions over their analysis.

However, this is inconsistent with the findings of the studies conducted by (Yusnita, 2021) and (Setiawan et al., 2018), which indicate that herding behaviour only partially impacts investment decisions. The behaviour of novice investors tends to diverge from that of other investors in investment decisions. This suggests that investors tend to prioritise fundamental information when making investment decisions. This investor's behaviour may also occur due to the perceived availability of information sufficient for the investor to make investment decisions, resulting in the investor's behaviour tending to be more than just following the crowd. Beginner investors who are generally still students have the opportunity to obtain abundant and accurate information as a basis for making investment decisions.

Herding behaviour is a moderating factor in the influence of overconfidence on investment decisions.

Table 7 demonstrates that herding behaviour cannot strengthen or weaken the relationship between overconfidence and investment decisions, with a value of 0.676 more than 0.10. The results further strengthen the first hypothesis that overconfidence does not influence investment decisions, even when moderated by herding behaviour. This indicates that the level of investor confidence remains unaffected, neither increasing nor weakening, despite herding behaviour as a moderating factor. The previously hypothesised high self-confidence in investors at PT Phintraco Sekuritas did not lead to investors being willing to make investment decisions despite the potential for leveraging the behaviour of other investors. The influence of herding behaviour and significant investment decisions does not make the overconfidence variable stronger. This result supports the findings of (BenMabrouk, 2018), which revealed that no herding tendency was observed during normal periods, neither in the stock market nor in the crude oil market. However, the significance of the stock market herding tendency diminishes during periods of crisis when market volatility is high. During times of financial difficulty, the market's volatility intensifies herding tendencies.

Herding behaviour is a moderating factor in the influence of advocate recommendations on investment decisions.

Table 7 also demonstrates the moderating role of herding behaviour in the relationship between advocate recommendations and investment decisions. An analysis of the data using Partial Least Squares (PLS) reveals that herding behaviour cannot strengthen or weaken the influence of advocate recommendations on investment decisions. In the previous hypothesis, it was found that advocate suggestion influences investment decisions. However, after being moderated by herding behaviour, it was found that it did not become stronger or weaker. This indicates that when making decisions, investors will consider recommendations from investment experts, but they may not necessarily follow the decisions of other investors. In his study, (Kanojia et al., 2022) demonstrated no empirical support for herding behaviour under market conditions. Kanojia further revealed that the market broadly embraces conventional financial ideas, which are globally accepted. However, they are unable to explain human behaviour during the process of making investment decisions. These assumptions are founded on the impractical belief that decision-makers during the investment period will act rationally. Investment decisions can be unpredictable, as evidenced by the influence of herding behaviour on investment decisions, which is insufficient to strengthen or weaken the impact of expert recommendations on decision-making.

## CONCLUSION

The study examines the direct relationship between overconfidence, risk perception, and advocate recommendations on investment decisions. Meanwhile, the indirect relationship tests herding tendency as a moderating variable for this relationship.

The first hypothesis of this study indicates that overconfidence behaviour does not impact investment decisions made by investors at PT Phintraco Securitas. The meaning is that respondents in investment decision-making do not rely on their knowledge and abilities but rather on information and recommendations from stockbrokers, friends, or family members of the respondents. The second hypothesis indicates no correlation between risk perception and investment decisions. Investors tend to overlook risks when deciding to invest in stocks due to the high interest in stock investments, especially among students during the 2020 and 2021 Pandemic, as a result of the intensive promotion by the Indonesia Stock Exchange in collaboration with social media influencers who extensively introduce the trend of stock saving among millennials. The third hypothesis indicates that advocate advice significantly influences investment decisions. Investors tend to consider appropriate recommendations based on the weight assigned to the level of importance of factors, ranging from important to less important. The identifiable factors for obtaining recommendations are the company's status within the industry, expected company revenue, company profit conditions, past stock performance, and investor dividends. The fourth hypothesis yields the answer that herding behaviour positively influences investment decisions. This assumes that investors tend to consider the decisions of other investors when making investment decisions, which will affect the quality of their decision-making. Especially novice investors, predominantly students, tend to prioritise other investors' opinions and do not rely on their analysis when making investment decisions.

Furthermore, this study demonstrates an indirect influence between the three aforementioned independent variables by moderating herding behaviour. In this case, herding behaviour cannot strengthen or weaken the relationship between the three independent variables and investment decisions. The results indicate that herding behaviour cannot act as a moderating variable. This suggests that although investors tend to follow the decisions of others in investment decision-making, this behaviour cannot strengthen or weaken the decisions of investors who already exhibit advocate recommendation behaviour or rely on expert recommendations such as investment feasibility studies. Similarly, very high levels of investor self-confidence do not influence investment decision-making, regardless of whether investors follow the decisions of others or not. This behaviour is accompanied by deliberately deciding not to buy or sell their investments hastily.

The findings of this research are expected to provide insights to the Indonesia Stock Exchange and securities companies to continue actively promoting the importance of investment and providing training, workshops, and studies to investors. The hope is that in the future, investors will become more astute in their investment decisions and be

able to generate revenue from their investments. This can make investors more confident to invest since they have sufficient knowledge and can make informed decisions. Encouraging the increase of community income and capital accumulation in issuers fosters further economic development.

There are several limitations to this study. Firstly, this study utilised respondents who were predominantly composed of students present throughout the data collection. Although 20% of the respondents are non-students, the fact that 70% of the respondents are students makes this research study predominantly focused on student behaviour. Secondly, this study focuses on overconfidence, risk perception, advocate recommendation, and herding behaviour without considering the aspects of the issuer or economic conditions. This results in limited outcomes on an individual's side.

Research on future investment decisions can help mitigate these limitations. Firstly, the study might focus more on non-student investors by utilising a wider range of behavioural aspects. Furthermore, investment decisions may also be influenced by factors other than investor behaviour. This presents an opportunity for further research to investigate the impact of variables such as the health condition of issuers and the regional or global economic conditions.

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